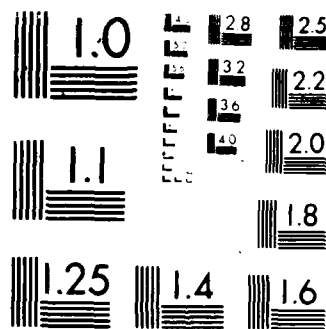


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## THESIS

THE CONSTRUCTION CONTRACTOR PERFORMANCE  
EVALUATION AS A CONTROL MECHANISM

by

Steven Richard Iselin

December 1986

Thesis Co-Advisors: Douglas Moses  
Raymond W. Smith

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The Construction Contractor Performance Evaluation  
As a Control Mechanism

by

Steven Richard Iselin  
Lieutenant, United States Navy  
B.S., University of Notre Dame, 1980

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT


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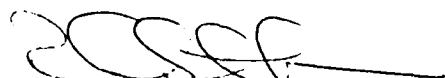
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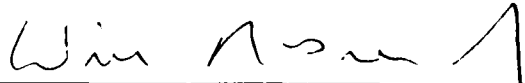
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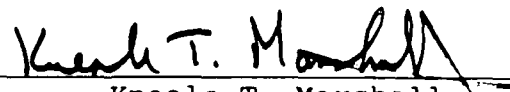
  
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### ABSTRACT

This study examined the Naval Facilities Engineering Command's current use of construction contractor performance evaluations (SF 1420) from the viewpoint of accepted control and measurement theory. Surveys of field contract administrators, supervisory civil engineers, field contract specialists, and construction contractors were completed to assess their use of and views about the evaluations.

The study concluded that: (1) NAVFAC lacks standards of performance to describe the distinction between satisfactory, outstanding, and unsatisfactory performances (2) Contractors are not generally aware of the evaluation process; (3) Evaluations are not used to provide contractors feedback; (4) Evaluators are not well trained; (5) Evaluations are not fully utilized; (6) The data base of evaluation information is inadequate.

The study recommends that: (1) NAVFAC issue a policy statement to contractors to clarify the evaluations uses, standards, and performance elements; (2) interim evaluations be issued to provide contractors feedback; (3) contractors receive copies of all their evaluations; (4) evaluators receive uniform training on completion of evaluations; (5) SF 1420 be modified to allow for a more specific evaluation.

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## I. INTRODUCTION

The purpose of this study is to examine the Naval Facilities Engineering Command's (NAVFAC) current use of construction contractor performance evaluations (Standard Form 1420). That current use will then be analyzed using accepted theory about control systems, measurements, and performance appraisals. Based on the analysis some recommended improvements to NAVFAC's contractor performance evaluation system will be made. Appendix A defines some of the key words used throughout this study.

### A. RESEARCH QUESTIONS

The primary research question is: how can NAVFAC make better use of the construction contractor performance evaluations? These secondary research questions will also be addressed:

1. How does NAVFAC currently use the performance evaluations?
2. What does the Federal Acquisition Regulation (FAR) say about the contractor performance evaluations?
3. What amount of attention do NAVFAC's managers place on the evaluations?
4. Do the contractors have a formal system for evaluating their subcontractors?
5. What do contractors think about the performance evaluation process?
6. What alternative uses are there for the evaluations?

7. What percentage of contracts result in outstanding, satisfactory, and unsatisfactory evaluations.

## B. METHODOLOGY AND LITERATURE REVIEW

Mail and telephone surveys were used to determine the current uses of and attitudes about contractor performance evaluations. Different mail surveys were sent to:

1. NAVFAC's Assistant Resident Officers-in-Charge of Construction (AROICC's) who directly administer construction contracts.
2. Construction contractors who have previously done work for NAVFAC.
3. Supervisory civil engineers who manage NAVFAC's field offices.

Field contract specialists were surveyed by telephone.

Literature on control and measurement systems was reviewed and provided a body of theory which was used to analyze the research data. The FAR, Department of Defense FAR Supplemental (DFARS), and NAVFAC's Contracting Manual (P-68) were used to develop background on the requirement for issuing contractor performance evaluations.

## C. LIMITATIONS

A search for literature about other contractor performance evaluation systems produced no relevant information for this study. Some data located at NAVFAC's Engineering Field Divisions (EFD) could not be provided due to the heavy seasonal workload demands. The survey population sizes were relatively small. The limitations on the use of data

generated from these small populations are discussed in Chapter IV.

#### D. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This writer concluded that NAVFAC could significantly improve its use of the contractor performance evaluations.

These recommendations for improvements are made:

1. Issue a policy statement describing to contractors the purpose for the evaluation system.
2. Issue contractors interim evaluations mid-way through the contract.
3. Provide contractors copies of their final evaluations.
4. Provide AROICC's training on how to complete the evaluations.
5. Increase management emphasis on the evaluation process.
6. Provide meaningful rewards to contractors who are rated outstanding.
7. Publicize the times evaluations are successfully used to deny contract awards to contractors with unsatisfactory performance records.
8. Improve the access to and use of contractor performance evaluation information.
9. Improve the Standard Form 1420.

#### E. ORGANIZATION

The rest of this study consists of:

- Chapter II--Background information about NAVFAC's contracting environment and the regulatory requirements for contractor performance evaluations.
- Chapter III--Control, measurement, and performance appraisal theory, and three models of possible uses for the evaluations.

- Chapter IV--The research data summary.
- Chapter V--An analysis of contractor performance evaluations as a control mechanism.
- Chapter VI--Conclusions and recommendations
- Supporting appendices.

## II. BACKGROUND

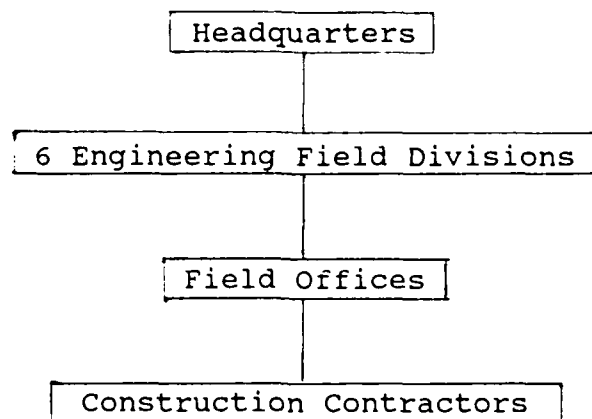
This chapter provides background information about:

1. NAVFAC's construction mission and contracting environment
2. NAVFAC's organization
3. The Federal Acquisition Regulation (FAR) requirements for pre-award surveys and performance evaluations
4. Standard Form 1420, Performance Evaluation-Construction Contract
5. The Small Business Administration (SBA) role in contractor responsibility determinations

### A. NAVFAC BACKGROUND

The Navy Facilities Engineering Command maintains the U.S. Navy shore facilities throughout the world. NAVFAC employs more than 25,000 people to ensure its mission is properly performed. NAVFAC augments its forces by contracting out more than \$2 billion worth of construction to civilian firms each year. NAVFAC's goal is to ensure each contract is completed safely, on time, within cost and at satisfactory quality.

To accomplish that goal NAVFAC is organized on the levels shown in the diagram below:



NAVFAC Headquarters provides overall guidance, makes policy decisions, and provides staff support to the Engineering Field Divisions (EFD). Each EFD awards construction contracts, monitors contract progress, and assists field offices in their contract administrative efforts. The field offices make some contract awards and administer the construction contracts. Each field office is managed by a supervisory civil engineer. Contract specialists award the contracts and provide expertise in contractual matters. The contract administration is performed by civilian contract administrators and by Civil Engineer Corps Officers (Assistant Resident Officers-in-Charge of Construction, AROICC's). Technical inspection of construction work is performed by construction specialists.

Almost all NAVFAC construction contracts are awarded using a publicly advertised sealed bid process. Under this process NAVFAC advertises its prospective contracts using an



invitation for bids. Contractors compete for the contract award by submitting sealed firm-fixed-price bids. The contract is awarded to the lowest responsive responsible bidder. To be responsive a bidder must meet all the conditions of the bid invitation. To be determined responsible a bidder must be able to demonstrate the capacity and capability to accomplish the contract work. NAVFAC has little control over who its low bidders are. It does have some control in determining whether a contractor is deemed responsible. Responsibility determinations are made during a pre-award survey. The next section describes the regulatory requirements concerning pre-award surveys and contractor performance evaluations.

## B. REGULATORY REQUIREMENTS

### 1. Pre-Award Surveys

During a Pre-Award survey, a contract specialist will examine the apparent low bidders qualifications to determine whether or not that contractor is responsible. To be determined responsible a prospective contractor must meet several criteria, including "Have a satisfactory performance record." (FAR, 1984, par. 9.104(c)) Contracts shall be awarded to responsible prospective contractors only." (FAR, 1984, par. 9.103(a)) The determination of a contractor's responsibility is important because:

The award of a contract to a supplier based on lowest evaluated price alone can be false economy if there is subsequent default, late deliveries, or other

unsatisfactory performance resulting in additional contractual or administrative costs. While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer. A prospective contractor must affirmatively demonstrate its responsibility, including when necessary, the responsibility of its proposed subcontractors. (FAR, 1984, par. 9.103(c))

## 2. Contractor Performance Evaluations

A major source of information about a contractor's past performance is their contractor performance evaluations from prior contracts. Evaluation of contractor performance is a special aspect of contracting for construction. The FAR says:

### (b) Preparation of Performance Evaluation Reports:

(1) The contracting activity shall evaluate contractor performance and prepare a performance report for each construction contract of

- (i) \$500,000 or more;
- (ii) \$100,000 or more, if any element of performance was either unsatisfactory or outstanding;
- (iii) More than \$10,000, if the contract was terminated for default; or
- (iv) \$100,000 or more, if the contract was terminated for the convenience of the Government.

(2) The report shall be prepared at the time of final acceptance of the work, at the time of contract termination, or at other times, as appropriate, in accordance with agency procedures. Ordinarily, the evaluating official who prepares the report should be the person responsible for monitoring contract performance.

(3) If the evaluating official concludes that a contractor's overall performance was unsatisfactory, the contractor shall be advised in writing that a report of unsatisfactory performance is being prepared and the basis for the report. If the contractor submits any written comments, the evaluating official shall include them in the report, resolve any alleged factual discrepancies, and make appropriate changes in the report.

(4) The head of the contracting activity shall establish procedures which ensure that fully qualified personnel prepare and review performance reports.

(b) Review of performance reports. Each performance report shall be reviewed to ensure that it is accurate and fair. The reviewing official should have knowledge of the contractor's performance and should normally be at an organizational level above that of the evaluating official.

(c) Distribution and use of performance reports. (1) Each performance report shall be distributed in accordance with agency procedures. One copy shall be included in the contract file. The contracting activity shall retain the report for at least six years after the date of the report.

(2) Before making a determination of responsibility in accordance with Subpart 9.1, the contracting officer may consider performance reports in accordance with agency instructions. (FAR, 1984, par. 36.201)

The Department of Defense FAR Supplement mandates that "Performance evaluations of construction contractors shall be used in making responsibility determinations." (DFARS, 1984, par. 36.201(c)) NAVFAC's P-68 offers this guidance about contractor performance evaluations:

PERFORMANCE REPORT. Contractor performance reports are valuable contract records and should be prepared by qualified personnel in a careful and conscientious manner. These reports must be based on factual rather than subjective data. These reports frequently form the basis for the selection of contractors for the accomplishment of critical work. They are essential in findings of nonresponsibility for contractors that have done prior work for NAVFACENGCOM. OICC's are responsible for assuring evaluation reports are promptly and accurately completed and distributed. Unless the contractor correctly points out factual errors, performance evaluation reports are not to be revised merely to meet contractor objections; rather, the contractor's comments are to be attached to the evaluation report. (P-68, 1985, par. 6-206)

#### C. STANDARD FORM 1420

Standard Form 1420, PERFORMANCE EVALUATION-CONSTRUCTION CONTRACTS is used for reporting contractor performance. A blank SF 1420 is included as Appendix B. The form allows

space for general contract data including: contractor name, complexity and description of work, contract start and finish dates, contract award amount, contract change orders, and the extent of subcontracting. Part II allows the rater to evaluate six performance elements (Quality of Work, Timeliness of Performance, Effectiveness of Management, Compliance with Labor Standards, Compliance with Safety Standards, and Overall Performance) as either Outstanding, Satisfactory, or Unsatisfactory. Any marks of outstanding or unsatisfactory must be supported by a narrative on the back of the evaluation. The evaluations are normally filled out by the AROICC upon completion of the contract work.

#### D. THE ROLE OF THE SMALL BUSINESS ADMINISTRATION

Statistics provided by NAVFAC's Small Business Liaison indicate that small business concerns receive approximately 80% of NAVFAC's contracts (dollar value) each year.

Whenever a prospective contractor is a small business, the Small Business Act vests in the Small Business Administration sole authority to make a determination of nonresponsibility. An affirmative responsibility determination by SBA is issued via the medium of a Certificate of Competency (COC). If SBA declines for any reason to issue a certificate of competency, the prospective contractor shall be rejected as not responsible. (P-68, 1985, par. 4-407.4(b))

The Small Business Administration (SBA) has this role in determining a contractor's responsibility:

(a) Upon determining and documenting that a responsive small business lacks certain element of responsibility (including, but not limited to, competency, capability, capacity, credit, integrity, perseverance, and tenacity), the contracting officer shall--

(1) Withhold contract award (see 19.602-3), and  
(2) Refer the matter to the cognizant SBA Regional Office in accordance with agency procedures . . .

(c) The referral shall consist of--

(1) A notice that a small business concern has been determined to be nonresponsible, specifying the elements of responsibility the contracting officer found lacking, and

(2) A copy of the solicitation, drawings and specifications, preaward survey findings, pertinent technical and financial information, abstract of bids (if available), and any other pertinent information that supports the contracting officer's determination. (FAR, 1984, par. 19.602-1)

Once the referral has been made to the SBA, the following procedures are followed:

(a) Within 15 business days (or a longer period agreed to by the SBA and the contracting agency) after receiving a notice that a small business concern lacks certain elements of responsibility, the SBA will take the following actions:

(1) Inform the small business concern of the contracting officer's determination and offer it an opportunity to apply to the SBA for a certificate of competency (COC).

(2) Upon timely receipt of the application and required documentation, send an SBA team to visit the concern to investigate it only for the specific elements of responsibility that the agency notice specified as lacking, and to make recommendations to the SBA Regional Administrator.

(3) If the Regional Administrator plans to issue or recommend issuance of a COC, provide advance notice of the proposed action to the contracting officer together with a brief statement of the reasons for it. If the contracting officer disagrees with the proposal, resolve the disagreement as provided in 19.602-3. (FAR, 1985, par. 19.602-2)

#### E. SUMMARY

This chapter described NAVFAC's mission, its organization, and its contracting procedures. The chapter also reviewed the regulatory requirements for pre-award surveys and contractor performance evaluations. Finally, the

chapter discussed the Standard Form 1420 and the Small Business Administration's role in determining a contractor's competency. The next chapter examines accepted theories about control and measurement systems and develops three models of potential uses for the contractor performance evaluations. The theory and models will be used later during the analysis of research data.

### III. CONTROL AND MEASUREMENT THEORY

The contractor performance evaluations provide a measure of the contractor's performance on a contract. The contractor performance evaluation process is intended to control the quality of construction contractors who receive NAVFAC contracts. This chapter examines accepted theories of measurement, control, and evaluation relevant to NAVFAC's use of contractor performance evaluations.

#### A. CONTROL THEORY

Management control is defined as, "... The process through which managers assure that actual activities conform to planned activities. . . . The control process . . . enables managers to detect deviations from the plan in time to take corrective action before it is too late." (Stoner, 1982, p. 592) This definition implies that even though one is "in control," actual performance can vary from planned. A manager exerts control when he takes action to eliminate variations from plan.

All control systems have some common characteristics

. . . any control system has at least these four components:

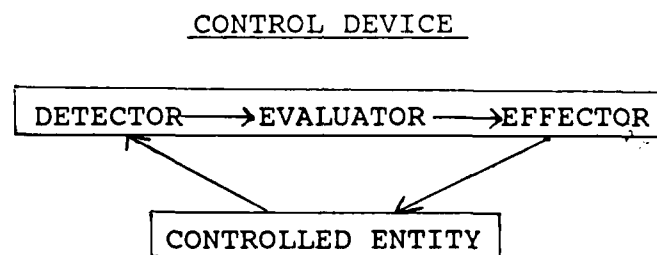
1. An observation device that detects or observes and measures or describes the activities or other phenomena being controlled. The term for this component may be observer, detector, or sensor.

2. An assessing device that evaluates the performance of an activity or organization, usually relative to some standard or expectation of what should be, and identifies out-of-control activities and conditions. The term for this component is evaluator assessor, or selector.

3. A behavior modification device for altering or changing performance if the need for doing so is indicated. This component may be called a director, modifier, or effector.

4. A means of transmitting information among the other devices. This component's term is communication network. (Anthony, Deardon, Beford, 1984, p. 8, underlines added for emphasis)

This model portrays the functioning of a control system according to Anthony.



The arrows in the model constitute the communication network. In this control system the detector, selector, and effector functions could all be performed by the same person, or each could be performed by different people.

Within a control system:

Individuals typically occupy one of three organizational positions with respect to each information and control system they interact with:

1. The measured and controlled position. This position involves being measured by the system.



2. The system maintenance position. Their primary task is seeing that the decision makers have the information they need.

3. The decision maker position. This position involves receiving the information from the control system in order to make decisions. (Lawler and Rhode, 1976, p. 8)

The control system affects the behaviors of people in each position in different ways. Usually, the behavior of greatest concern is that of the person being measured. Those who design control systems should consider the system's effects on behavior to ensure dysfunctional behaviors are not produced.

All information and control systems have these characteristics in common:

1. They all have some similar structural characteristics.
  - a. They all collect, store, and transmit information in the form of abstract measures of reality.
  - b. The collected abstract information is stored and transmitted in a specific form and with specific frequency.
  - c. The summarized information is distributed to a specific, usually pre-determined, group of people.
2. All information tries to accomplish the same thing--influence behavior. The crucial aspect of any control system is its influence on behavior. (Lawler and Rhode, 1976, pp. 5-6)

Given that control systems have some basic similarities, one can ask, what qualities make one control system better than others? How are good control systems developed is another good question. A good place to start is deciding the purpose of the control system.

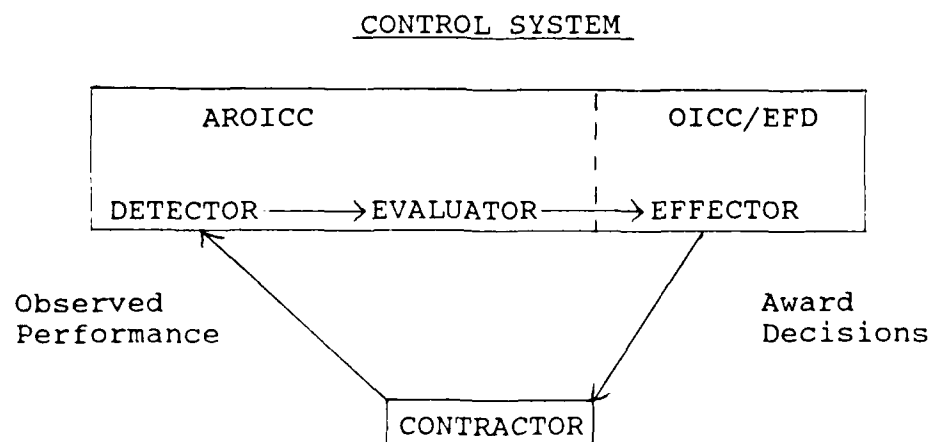
Some measure performance to provide management with the information they need to control employee's present behavior. Others provide top management with the information they need for long-range planning. And a third group provides ongoing feedback to employees about their job performance. (Lawler and Rhode, 1976, p. 38)

## B. CONTRACTOR PERFORMANCE EVALUATIONS AS A CONTROL SYSTEM

Lawler and Rhode's previous quote described three possible uses for control systems. Let us now examine how NAVFAC's Contractor Performance Evaluation system could fulfill each of those three uses.

### 1. Use I: Award Decisions

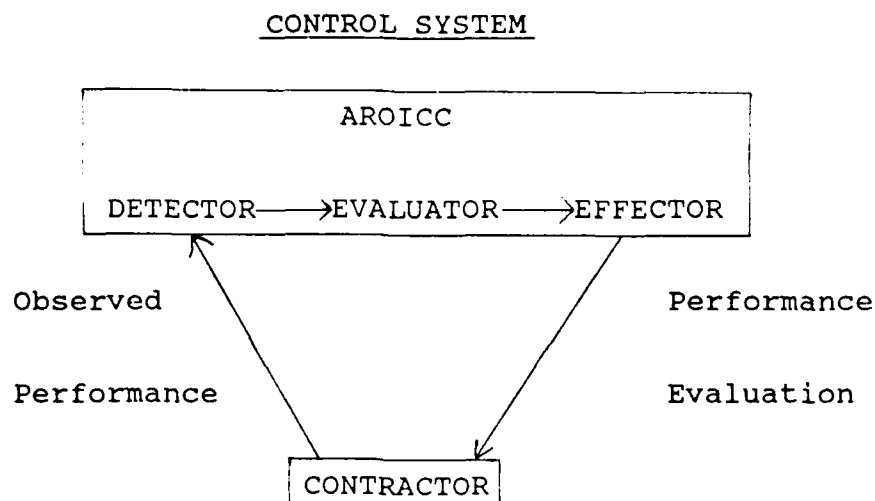
Providing top management with information for long-range planning is currently the actual purpose of NAVFAC's contractor performance evaluation system. The evaluations provide top management with information which is used to make decisions about whether contractors receive future contract awards. This model describes the control system:



In this model the AROICC functions as the detector and evaluator. The OICC or EFD acts as the effector because the action of interest is the future contract award.

2. Use II: Controlling Ongoing Contractor Performance

If NAVFAC issued interim performance evaluations to contractors, then their behavior on current contracts could be affected. This model depicts the evaluation system functioning as a control of a contractor's current behavior.

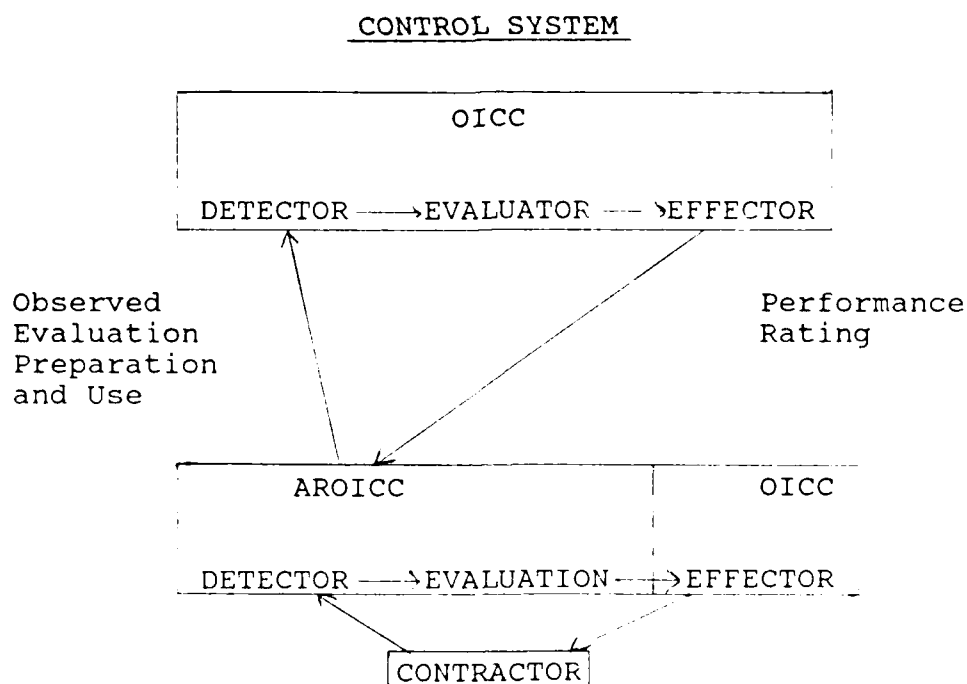


Notice in this model that the AROICC performs the detector, evaluator, and effector functions by himself. The AROICC is the effector because the action of interest is controlling the ongoing contractor performance.

3. Use III: Controlling AroICC Performance

Lawler and Rhodes third use, providing ongoing feedback to employees about their job performance, could be satisfied under NAVFAC's current evaluation system.

Specifically, top management could control the AROICC's use of contractor performance evaluations by rating the AROICC's performance on: (1) the preparation of contractor evaluations, and (2) the usefulness of contractor performance evaluations as a source of information prior to administering a contract. The AROICC's performance should improve because preparing a better contractor performance evaluation will require increased documentation and understanding of the contractor's performance. Reviewing the contractor's past performance evaluations prior to administering a new contract will alert the AROICC to that contractor's previous problems. This two-tiered model depicts that control possibility within the NAVFAC organizational structure:



In this model, on the upper tier the OICC acts as the detector, evaluator, and effector. The OICC is the effector because the action of interest is controlling the AROICC's performance.

The three models just presented include the four basic characteristics of control systems described by Anthony. The evaluation system also meets the criteria described earlier by Lawler and Rhode, because:

- The evaluations collect, store, and transmit information.
- The information is stored in a specific format (SF 1420) and is collected with specific frequency.
- The summarized information is distributed to a specific group of people (OICC, EFD, Army Corps of Engineers).
- The evaluations purpose is to assist in determining the responsibility of contractors. If one assumes contractors want to be determined responsible, then the evaluations can be assumed to have an influence on their behavior.

#### C. CONSIDERATIONS IN DEVELOPING AND EVALUATING CONTROL SYSTEMS

A control system provides the user with information in the form of a measure. The following items represent some characteristics which make information useful to its users:

1. Usefulness for Decision Making--The characteristics of information that make it a desirable commodity can be viewed as a hierarchy of qualities, with usefulness for decision making of most importance (FASB, 1980, p. 4037). There are many user-specific factors to consider when deciding what information is most useful for decision making. These factors include: ". . . the decisions to be made, the methods of decision making to be used, and the information already possessed or obtainable from other sources." (FASB, 1980, p. 4037)

2. Understandability--"Information cannot be useful to decision makers who cannot understand it, even though it may otherwise be relevant to a decision and be reliable." (FASB, 1980, p. 4037)
3. Relevance--"Does the measure contain information pertinent to the decision at hand? . . . Looking forward, relevance implies predictive ability; . . . Looking backward, relevance implies feedback value." (Moses, 1986, p. 9) "Relevant information is capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct prior expectations. Information can make a difference to decisions by improving decision makers' capacities to predict or by providing feedback on earlier expectations. Without a knowledge of the past, the basis for a prediction will usually be lacking." (FASB, 1980, p. 4038)
4. Timeliness--"If information is not available when it is needed or becomes available so long after the reported events that it has no value for future action, it lacks relevance and is of little or no use." (FASB, 1980, p. 4038) "Timeliness does not cause relevance, but lack of timeliness can make an otherwise useful measure irrelevant." (Moses, 1986, p. 10)
5. Reliability--"To what degree do repeated measurements of the same attribute vary?" (Euske, 1984, p. 86) "Reliability connotes stability, consistency, objectivity, dependability, and absence of bias. In short reliability is the relative absence of errors of measurement in the measurement instrument." (Moses, 1986, p. 5)
6. Requisite Variety--"Do the measures make sufficiently fine distinctions among objects? A given decision situation may require a particular kind of separation or differentiation among objects. If a measurement process is to provide useful information for the decision, it should result in measures that capture the required distinctions." (Moses, 1986, p. 12)
7. Completeness--"A crucial aspect of any control system is how completely and inclusively it measures the behaviors that need to be performed by a job holder. . . . If measures are incomplete, a person will be motivated to perform only a portion of the behavior needed for organizational effectiveness." (Lawler and Rhode, 1976, p. 42)

8. Valence--"To what degree are the measurements tied to the organizational reward system? . . . Individuals act to satisfy personal needs. To the extent that some needs are satisfied by the organizational reward system, and to the extent that rewards are linked to specific measurements, behavior to influence the measurements will be motivated." (Moses, 1986, p. 16)
9. Controllability--"Can the person measured influence the events or objects that are represented by the measurements? Without control, individuals cannot feel responsible for outcomes or feel satisfaction in outcomes, and consequently, will not be intrinsically motivated to perform. Without control individuals will see no link between his or her behavior and potential rewards, and consequently will not be extrinsically motivated." (Moses, 1986, pp. 16-17)
10. Objectivity--"Some systems use objective measures while others use subjective ones. . . . Research shows that the more objective measures are, the more likely they are to motivate behavior. . . . It is only logical that if individuals don't understand how the measure operates because it is highly subjective, they will see little connection between their behavior and any reward based on the measure. . . . Another reason objectivity of measures is important has to do with the climate of mistrust present in most organizations. When employees do not believe they will be evaluated fairly, they do not believe that good performance on their part will lead to rewards, and as a result motivation is low." (Lawler and Rhode, 1976, pp. 42-47)

#### D. OTHER CONSIDERATIONS FOR DESIGNING A CONTROL SYSTEM

Once the purpose for a system is made clear, and all the user-specific needs are identified, the system designer can proceed. These other factors should be considered when developing a control system. Following each listed factor below is a description of that factor, and a discussion of what makes each factor a desirable feature of a control system.

1. Nature of Standards--The research and theory on extrinsic motivation make one point quite clear: Employees are not motivated to reach goals that they don't feel they can achieve. . . . The research on goal setting (e.g., Locke, 1968) suggests that individuals tend to achieve easy goals but not exceed them. The result is mediocre performance. . . . To set goals at the proper level of difficulty, individuals who have information on where the standards should be set must be involved. Further, the individuals whose performance is being measured must be aware of the information that was used to set the standards so they will realize that the standards are reasonable.
2. Source of Discrimination--As with standard setting, it is crucial who acts as discriminator. . . . Whoever it is must have two attributes: the knowledge to make the comparisons and the trust of the person being measured.
3. Pattern of Communication--Control systems vary widely in terms of who receives information about deviations from the standard. . . . For extrinsic motivation to be present, the person who has the power to give rewards must receive the information about the results of the discrimination. This is a precondition to rewards being allocated on the basis of performance which in turn is a precondition to the perception that rewards are based upon performance. However, for this perception to exist, . . . it is desirable to have the person whose performance is being measured, and other employees who are doing similar work, receive the communication.
4. Speed and Frequency of Communication--Control systems differ in how quickly they report the results of their measurement process. . . . As a general rule, communications about performance measures are most effective in producing extrinsic motivation when they are fast and frequent. When the communications about performance are delayed, it is impossible to closely tie rewards to the actual performance of the person and this has the effect of reducing the perceived relationship between performance and rewards. It also creates doubts among employees about the validity and usefulness of the performance measurement data. (Lawler and Rhode, 1976, pp. 42-43)

The theory on performance appraisals offers this advice:

Today's employees want more from an organization than just their salary. They want to know how they are



performing in their jobs. . . . People do not mind being evaluated if the appraisal system is fair and comprehensive to them. (Cohen and Jaffee, 1982, p. 94)

Wells says an effective and defensible performance appraisal system should have these qualities:

1. Understandable Standards--Every employee should understand the standards against which he or she will be evaluated. . . . They should have prior knowledge of what is expected.
2. Knowledgeable Appraisers--Another problem with similar implications, may arise when immediate superiors do not possess sufficient technical knowledge or expertise in an area of specialization to reasonably judge the results produced by others.
3. Appraisers Should Be Well Trained--There are a number of reasons why it is critical that those conducting the appraisals should be well trained to guarantee consistency, . . . Consistency in administration is integrally linked to the defensibility of the system in the event of a legal challenge.
4. Communication of Policy and Purpose--The purposes and uses of appraisals should be clearly stated in the policy manual, as well as in the employee handbook. . . . Fully informing all employees of appraisal policy and purposes will minimize uncertainty and potential resistance. Employees understanding will increase the potential for positive results from appraisals. (Wells, 1982, pp. 777-781)

The items Wells stresses are consistent with Lawler and Rhodes considerations for control systems. The theories and models presented in this chapter will be used in Chapter V during the analysis of NAVFAC's current use of performance evaluations. The next chapter presents the data generated during the research about NAVFAC's current use of contractor performance evaluations.

#### IV. RESEARCH DATA

##### A. OVERVIEW

This chapter describes the research methods used to examine NAVFAC's current use of Contractor Performance evaluations. The research data produced is also presented.

The following sources of data were used:

1. Mail survey of AROICC's.
2. Mail survey of construction contractors.
3. Telephone survey of field office contract specialists.
4. Mail requests for information from EFD points of contact.
5. Mail survey of field office Supervisory Civil Engineers.
6. Small Business Administration sources.

The mail and telephone surveys were prepared using Dillmans' Total Design Method (Dillman, 1982). The Total Design Method is a book which provides comprehensive instructions on how to prepare successful mail and telephone surveys. Among other things, the Total Design Method: (1) helped reduce evaluation bias, (2) gave tips for increasing the survey response rate, and (3) provided examples of properly phrased survey questions. The purpose for, background about, and survey results for each data source are presented below.

## B. AROICC SURVEY

### 1. Purpose

A mail survey of AROICC's was used to determine:

- AROICC opinions about the effectiveness and usefulness of the contractor performance evaluations.
- The amount of training AROICC's have in completing an evaluation.
- AROICC perceptions about management's emphasis on evaluations.
- AROICC opinions on the use of interim evaluations.

### 2. Background

Before the AROICC survey form was finalized, 8 "pilot" surveys were sent to AROICC's to determine if the responses would generate acceptable data. All 8 surveys were returned. A review of the responses resulted in the elimination of one question, and minor rewording of two others. The final survey (Appendix C) was sent to 60 AROICC's. The AROICC's surveyed were chosen from NAVFAC's P-1, Navy Civil Engineer Corps Directory. Only LTJG's and above with more than 1 year experience as an AROICC were surveyed. 54 of the 60 (90%) surveys were returned. The data summary below includes the 8 pilot surveys, for a final response from 62 of 68 (91%) AROICC's.

### 3. AROICC Survey Results

The AROICC survey questions and summarized responses are presented below.

Question 1. Approximately how many satisfactory, outstanding, and unsatisfactory contractor performance evaluations have you written during your career as a contract administrator?

Totals: 1361 (86%) --Satisfactory  
119 (7.6%)--Outstanding  
100 (6.4%)--Unsatisfactory  
1580

The average respondent has filled out 25.4 evaluations each.

Question 2. Does your EFD have an instruction governing contractor performance evaluations? (All EFD's do have instructions.)

45 of 62 (64%)--YES  
16 of 62 (26%)--NO  
1 of 62--Did not answer

Question 3. If answer to question 2 was yes, how much help does the instruction provide when you are filling out an evaluation?

1 of 45--A Big Help	X	3 points = 03
22 of 45--Some Help	X	2 points = 44
16 of 45--A Little Help	X	1 point = 16
4 of 45--No Help	X	0 points = <u>0</u>
2 of 45--Did not answer		
		65 points/43
		respondents =
		1.51

The weighted average response of 1.51 falls mid-way between a little and some help.

Question 4. Have you ever received any training on how to complete the performance evaluation form?

23 of 62 (38.1%)--YES  
39 of 62 (61.9%)--NO

If YES, which of these statements most accurately describes the level of your training?

4--Formal Classroom training  
5--Briefed during AROICC staff meeting  
11--OJT by Contract Specialist or another AROICC  
12--Given a copy of an old evaluation as a guide  
32\*

\*--Some of the respondents listed more than one type of training

Question 5. Do you ever review a contractor's record of past performance prior to the start of a new contract?

23 of 62 (38.1%)--YES

39 of 62 (61.9%)--NO

If yes, approximately how often do you do so?

12 do so more than 50% of the time

11 do so less than 50% of the time

Question 6. Do you know where you could find a file of all of a particular contractor's past performance evaluations?

25 of 62 (40%)--YES

37 of 62 (60%)--NO

Question 7. On a scale of 1 to 10, how effective do you think the existing performance evaluation system is at improving the overall performance of NAVFAC contractors? (1 not effective to 10 very effective)

	not effective						very effective				
scale--	0	1	2	3	4	5	6	7	8	9	10
# of responses	--1	11	11	20	7	3	2	3	0	0	1

The average was 3.03. A trimmed average (omit the lowest and highest response) was 2.96. 73% of the responses were 3 or less.

Question 8. Have you ever written an interim evaluation on a contractor mid-way through a project?

15 of 62 (24%)--YES

47 of 62 (76%)--NO

If yes, what effect does the interim evaluation have on a contractor's performance?

10 of 15 said there was a noticeable improvement in the contractor's performance.

Question 9. Do you think interim evaluations would help you to positively influence a contractor's behavior?

41 of 62 (67%)--YES

18 of 62 (29%)--NO

3 of 62 ( 4%)--Did not answer

Why? The YESES typically said:

- a. Contractor will adjust behavior to please the NAVY
- b. Early feedback will prove useful to the contractor
- c. Will provide an evaluation on file if the AROICC is transferred
- d. Contractors are concerned about their reputations

The NO's typically said:

- a. Contractors are only motivated by money

Question 10. Which of these statements most accurately describes how much emphasis your office management places on the performance evaluations?

- 18 of 62 (29%)--Evaluations are stressed frequently  
19 of 62 (31%)--Evaluations are stressed occasionally  
14 of 62 (22%)--Evaluations are stressed if contractor performance unsatisfactory  
5 of 62 ( 8%)--Evaluations are stressed when overdue to the EFD  
5 of 62 ( 8%)--Evaluations are never stressed  
1 of 62 ( 2%)--Did not answer

Question 11. What comments do you have about the way we evaluate our contractors? Please include any suggestions for improving the evaluation process.

This is a summary of the comments received.

<u>Frequency</u>	<u>Comment</u>
13	The evaluations are not effective because NAVFAC issues subsequent awards to contractors who've gotten unsatisfactory evaluations
11	The evaluation forms need more performance and rating categories to allow for a more detailed evaluation of the contractor's performance
6	The EFD's need to issue periodic summaries of contractor performance for use by field offices
5	Unsatisfactory evaluations are avoided because they take too much time, effort, and documentation to support
3	The evaluations are too subjective

- 3        A policy should be established to mandate denial of awards after a certain number of unsatisfactory evals
- 3        We need meaningful rewards for outstanding contractors
- 2        The Small Business Administration rarely rules against a contractor in a Certificate of Competency case
- 2        Interim evaluations should be sent to contractors
- 2        AROICC's should be better trained in filling out evaluations
- 2        Time constraints affect the quality of evaluations
- 1        The narrative should be written in bullet statements
- 1        Need some criteria for translating separate ratings on each item into an overall rating
- 1        A contractor's performance is affected by the quality of the project design
- 1        Copies of the evaluations should be sent to the contractors' bonding companies

#### C. CONTRACTOR SURVEY

##### 1. Purpose

The contractor survey was used to determine:

- Contractor opinions about the quality of NAVFAC's performance evaluations.
- Contractor opinions about the performance evaluation process and how it might be improved.
- Contractor systems for evaluating subcontractors
- Contractor opinions about receiving interim evaluations.

## 2. Background

Time constraints prevented the use of a "pilot" survey. Contractor mailing lists with contractor names, addresses, and points of contact were requested from each EFD. Contractors on the lists were to have regularly performed contracts within the EFD. 4 of 6 EFD's provided the contractor lists, but only 2 of 4 included names of contractor points of contact. Using those lists, surveys were sent to 80 contractors. 32 of the 80 (40%) returned the surveys, but 13 did not complete them because they had never seen nor received a performance evaluation from NAVFAC. Of the 19 who did complete the surveys, 10 contractors had seen or received an evaluation, and 9 had not. A copy of the contractor survey is included as Appendix D.

## 3. Contractor Survey Results

The contractor survey questions and summarized responses are presented below.

Question 1. On a scale of 1 (no value) to 10 (high value), how much value do you assign to the performance evaluation rating you receive on a project?

	no value						high value			
scale--1	2	3	4	5	6	7	8	9	10	
# of --4	0	0	0	3	0	1	4	3	4	
responses										

The overall average was 6.6. The average for those who have seen an evaluation before was 7.9. 63% of the responses were 7 or above.



Question 2. How useful to you think interim evaluations would be in providing you feedback about your performance on a contract?

9 of 19 (47%)--Very Useful  
4 of 19 (21%)--Fairly Useful  
3 of 19 (16%)--Useful  
2 of 19 (11%)--Of Little Use  
1 of 19 ( 5%)--Did Not Answer

Of the 10 who've seen an evaluation before, 9 of 10 said fairly or very useful.

Question 3. Would you like to see NAVFAC issue interim performance evaluations on its contracts?

13 of 19 (68%)--YES  
6 of 19 (32%)--NO

Why? The yes's said:

- a. It would eliminate any surprises in the final evaluation
- b. It would improve AROICC/contractor communications
- c. Contractors need feedback to know if work satisfies the government
- d. Contractors can correct mistakes before it is too late

The no's said:

- a. AROICC's are not qualified to make the evaluations
- b. Contractors already know how good their performance is.

Question 4. Do you have a system for evaluating your subcontractors?

None of the respondents have a formal evaluation system. All make basic subjective judgments about the subcontractor performance. Those who don't perform well are not used on future jobs.

Question 5. Would you find it useful to receive a copy of your performance evaluation for each contract you perform?

18 of 19 (95%)--YES  
1 of 19 ( 5%)--NO

Comments: These general comments were made by contractors who were surveyed:

Frequency	Comment
2	Evaluations are improperly used by AROICC's as a bargaining tool at contract close out
2	Evaluations are too subjective
2	Evaluations are poorly documented
1	Contractors should also evaluate the AROICC's
1	An appeal process is needed to mediate disputed evaluations
1	Evaluations don't matter because poor contractors still receive contract awards.

#### D. CONTRACT SPECIALIST SURVEY

##### 1. Purpose

A telephone survey of contract specialists in 20 of NAVFAC's field contract offices was used to determine:

- How performance evaluations were used in support of the pre-award survey process.
- If the evaluations provided contract specialists enough information to determine contractor responsibility.
- Contract specialists attitudes about the level of management emphasis on performance evaluations.
- Contract specialists' use of the EFD performance evaluation files.

##### 2. Background

Survey questions were asked uniformly to all 20 respondents, and answers were consistently recorded. 5 of the 20 respondents were not capable of answering some of the questions because of their offices' unique organizational structure. This information is used with the caveats that: (1) the survey population is statistically quite small, and

(2) the size and volume of contracts administered in each surveyed office was not determined. A copy of the survey is included as Appendix E.

### 3. Contract Specialist Survey Results

The contract specialist survey questions and summarized responses are presented below.

Question 1. What percent of the time do you use a contractor's past performance evaluations to assist you during the Pre-Award Survey process?

- 1 of 20 ( 5%)--Use the evaluations 100% of the time
- 8 of 20 (40%)--Use the evaluations if the contractor has done work in their office before
- 11 of 20 (55%)--Use the evaluations less than 10% of the time. They prefer to rely on phone calls to contractor provided references for information about a contractor's past performance.

Question 2. What percent of the time do you discuss the pre-award survey results with the AROICC assigned to the project?

- 1 of 20 ( 5%)--The AROICC does the pre-award survey
- 4 of 20 (20%)--Notify the AROICC 90% of the time
- 11 of 20 (55%)--Notify the AROICC if the contractor's past performance is less than satisfactory
- 4 of 20 (20%)--Do not notify the AROICC at all

Question 3. Other than your own files, do you use any other sources of contractor performance evaluations?

- 14 of 20 (70%)--Use no other source
- 5 of 20 (25%)--Use their EFD's file less than 5% of the time
- 1 of 20 ( 5%)--Does not even keep its own file of evaluations

Question 4. Do the performance evaluations give you enough information to do the pre-award surveys properly?

- 8 of 20 (40%)--Said the information was adequate
- 7 of 20 (35%)--Said the information on the evaluations was too general, and that more specific comments about contractor performance should be made
- 5 of 20 (25%)--Provided an inadequate response

Question 5. How much management emphasis is placed on performance evaluations within your office?

- 4 of 20 (20%)--Strong management emphasis
- 7 of 20 (35%)--A fair amount of management emphasis
- 5 of 20 (25%)--A little management emphasis
- 4 of 20 (20%)--Provided an inadequate response

Question 6. In the past year how many contractors did your office withhold awards from because of an unsatisfactory record of past performance?

- 12 of 20 (60%)--Zero
- 5 of 20 (25%)--One
- 2 of 20 (10%)--Four
- 1 of 20 ( 5%)--Six

#### E. EFD INFORMATION

The following information was gathered from the EFD points of contact in response to mail and telephone requests. 1 of the 6 EFD's chose not to provide any information.

1. All 5 EFD's have instructions governing the use and preparation of contractor performance evaluations.
2. 2 of 5 EFD instructions encourage the use of interim evaluations if the contractor's performance is unsatisfactory.
3. All EFD's keep past performance evaluations separated by contractor.
4. Pacific Division augments the SF1420 with its own "Supplemental Information Sheet" (Appendix F). This sheet allows AROICC's to rate contractors on more

specific items. The sheet also has two extra ratings, marginal and exceptional.

5. Pacific Division keeps an evaluation record form (Appendix G) on each contractor. That form summarizes a contractor's performance evaluations from many contracts.
6. Northern Division is trying to implement a computer data base which will create a separate file of evaluation data for each contractor. The data base will be accessible to all of Northern Divisions field offices.

#### F. SUPERVISORY CIVIL ENGINEER SURVEY

##### 1. Purpose and Background

A mail survey of 10 supervisory civil engineers was conducted to assess their attitudes about contractor performance evaluations. 7 responses were received (70%). A copy of the survey is included as Appendix H. Several of the survey questions were not well prepared and their responses were unsuitable for use. This information is used with the caveat that the sample population is statistically very small.

##### 2. Supervisory Civil Engineer Survey Results

The supervisory civil engineer survey questions and summarized responses are presented below. Those questions which were inadequately prepared are not included here.

Question 3. Do you provide your AROICC's any training on how to complete the performance evaluation form?

3 of 7 said YES

3 of 7 said NO

1 of 7 does all evaluations himself, therefore no training needed

Question 4. Does your office keep separate performance evaluation files on each contractor?

5 of 7 said NO  
2 of 7 said YES

Question 6. Does your office write interim evaluations on contractors midway through a report?

5 of 7 said NO  
2 of 7 said YES

Question 7. Do you think NAVFAC should issue interim evaluations on all of its construction contracts?

6 of 7 said NO--They fear the field office staff already  
has more work than it can comfortably  
handle  
1 of 7 said YES

Question 9. If you had access using the office computer to a file listing all of a contractor's past performance evaluations, would you use it to get a feel for how a prospective contractor of yours usually performs?

6 of 7 said YES  
1 of 7 said NO

Question 10. Do you think we should give our contractors a copy of their performance evaluations at the end of a contract?

5 of 7 said YES  
2 of 7 said NO

Question 11 asked for comments on how NAVFAC could improve its evaluation system. These responses were received:

Frequency	Comment
2	The evaluations should include more specific items, and have more rating categories
2	Evaluations have no effect on contractors because the poor performers continue to get new contract awards
1	The excessive amount of documentation needed to support an unsatisfactory rating is burdensome

- 1 The form should require an explanation of a contractor's satisfactory performance also
- 1 Evaluations are given superficial treatment by AROICC's because it takes too much time to prepare a good evaluation

G. SMALL BUSINESS ADMINISTRATION DATA

1. Purpose and Background

When small businesses are involved the Small Business Administration has the authority to override a NAVFAC decision of contractor non-responsibility. That override occurs when a Certificate of Competency is issued. 2 of the AROICC's responding to the survey said the SBA rarely rules against contractors on COC decisions. The data presented below comes from the General Accounting Office report #RCED-86-120BR dated April 1986 and titled "Small Business Administration-Status, Operations, and Views of the Certificate of Competency Program." The report highlights actual uses of the contractor performance evaluations within the SBA's COC system.

2. SBA Data

All data presented below comes from the above cited GAO report. The data represents all types of contracts reviewed by the SBA including some construction contracts.

a. This table provides statistics on the COC activity for 1981-1985.

Fiscal Year	Referrals to SBA	Contractor Applications	COC approvals	Application denials	Direct Awards without a COC
1981	2652	880	489	322	12
1982	2837	998	495	409	13
1983	2949	1071	556	393	20
1984	3072	1099	547	378	29
1985	<u>4223</u>	<u>1652</u>	<u>884</u>	<u>540</u>	<u>54</u>
Totals	15733	5700	2971	2042	128

The numbers of approvals, direct awards, and denials do not equal the number of applications because of such things as applications withdrawn, referrals withdrawn, and procurements withdrawn.

Based on the total figures for the five years, there were 10,033 contractors who did not apply for COC's, and another 2042 who were denied COC's. Those 12,075 contractors represent 76% of the total referrals to the SBA. Thus 76% of contractors referred to the SBA do not receive the contract award.

b. The GAO report included a survey of 279 cases. The survey looked at the processing time for those cases. The FAR allows the SBA 15 days to process a case, or a longer time if agreed to by the referring contracting agency. The results of the survey showed:

<u>Number of Workdays</u>	<u>Cases</u>	
	<u>Number</u>	<u>Percent</u>
15 or less	128	44.6
16-20	84	29.3
21-25	32	11.1
26-35	17	5.9
36 or more	<u>18</u>	<u>6.3</u>
Total	279	100

Though only 44.6% of the cases were completed within the allowed 15 days, 85% were completed within 25 days.

c. The SBA's contractor review procedures are generally consistent with DOD's and GSA's review procedures.



d. No statutory or regulatory criteria exist to guide SBA in evaluating prior performance when making COC decisions. In addition, SBA has not established specific written criteria to make such determinations. The SBA evaluators must rely on professional judgment much like the AROICC's do.

e. Of 287 cases sampled, 109 were referred to the SBA because of the contractors poor prior performance. Of those 109, SBA agreed with the referring agency in 51 cases, or about 47%, and denied the COC.

#### H. SUMMARY

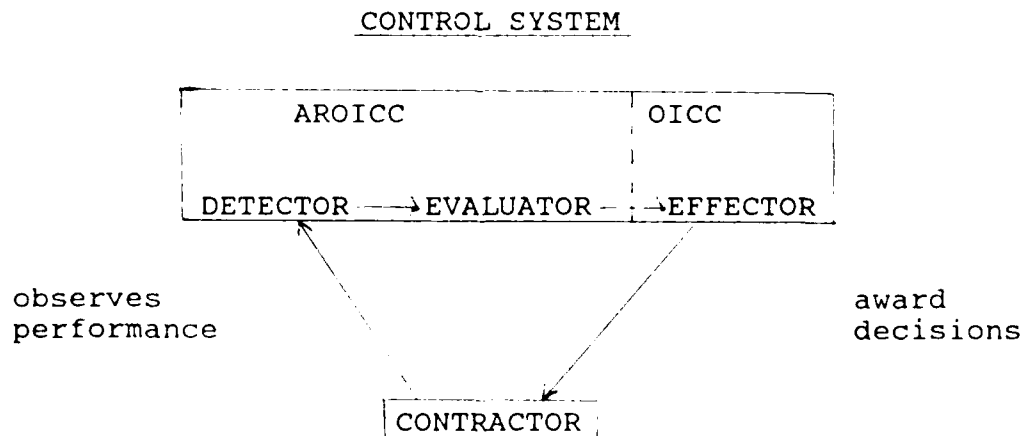
This chapter introduced data from several sources about NAVFAC's current use of the contractor performance evaluations. The next chapter provides an analysis of that data from the viewpoint of accepted control and measurement theory from Chapter III.

## V. ANALYSIS OF CONTRACTOR EVALUATIONS AS A CONTROL MECHANISM

Chapter III presented some accepted control and measurement theory as well as three possible uses for the contractor performance evaluations. Chapter IV presented data about NAVFAC's current uses of the contractor performance evaluations. This chapter provides an analysis of those current uses from the viewpoint of the accepted theories. The analysis focuses on the three possible uses for the evaluations from Chapter III.

### A. USE I--AWARD DECISIONS

The FAR, DFARS, and NAVFAC P-68 each cite only one purpose for the contractor performance evaluations; to provide information about contractor past performance during the pre-award survey. This control model reproduced from Chapter III depicts the control system.



## 2. Analysis

When analyzed from the viewpoint of accepted control theory, NAVFAC's current use of the contractor performance evaluation system for making contract award decisions is weak in the following areas.

### a. Standards

Lawler and Rhode, and Wells said control and appraisal systems should have well-defined standards. The standards should be understood, and should not be too easy or too difficult to attain. The FAR, DOD FAR Supplement, and NAVFAC P-68 all are silent about standards for contractor performance. No guidance exists which defines what constitutes satisfactory, unsatisfactory, or outstanding performance. Instead, each AROICC is left to exercise his own professional judgment when evaluating a contractor's performance.

### b. Usefulness For Decision Making

This characteristic of information is most important. Despite its importance, 11 of 20 contract specialists use the evaluations less than 10% of the time when doing pre-award surveys, and 14 of 20 do not use other available sources of evaluations. 5 of 7 supervisory civil engineers said their offices don't keep separate files of performance evaluations. These facts indicate NAVFAC could improve its use of the contractor performance evaluations in the contract award decision making process.

The following association of responses by the contract specialists provides some insight into the usefulness of the performance evaluations. The responses to question 1 (What % of the time do you use the evaluations during the pre-award survey process?) were matched against the responses to question 6 (In the past year how many contractors did your office withhold awards from because of an unsatisfactory record of past performance?) These results show that offices which used the evaluations more often were able to support more contract award denials:

		0	1	2	4	6
Question 6--Number of contractors denied awards last year						
Question 1--What % of: the time do you use evaluations during pre-award surveys?	Less than 10%--	8	3	0	0	0
	More than 10%--	4	2	0	2	1

The offices who use the performance evaluations more often during the pre-award survey process reported a higher incidence of denying contractors awards.

#### c. Communication

Wells says employees should be told the purpose and uses of performance appraisals to minimize uncertainty and resistance. The results of the contractor survey clearly indicate the contractors are unaware that the evaluation system even exists (22 of 32 had never received an evaluation). Lawler and Rhode say those being evaluated should receive the evaluations. NAVFAC currently notifies

contractors of their performance evaluation only if the performance is unsatisfactory (6.4% of the contracts).

d. Training

Wells says that appraisers should be well-trained. Only 38% of AROICC's surveyed said they'd been trained in completing evaluations (most of that training was informal). Without common training NAVFAC is left with AROICC's who hold a wide variety of ideas about:

- The intent of each rating category
- The amount of detail needed to support an evaluation
- The kinds of documentation needed to support an evaluation
- The standards of performance for various ratings

This wide variety of ideas reduces the reliability of the evaluation system. Recall that reliability connotes stability, consistency, objectivity, dependability, and absence of bias. Decreased reliability leads to decreased credibility when the SBA reviews the performance evaluations.

e. Completeness

Incomplete measures may motivate people to perform only a portion of the behavior needed for organizational effectiveness. Standard Form 1420 allows contractors to be rated on:

- Quality of Work
- Timely Performance
- Effectiveness of Management

- Compliance With Labor Standards
- Compliance With Safety Standards

While these broad categories cover the range of important elements in contractor performance, they lack specificity, and therefore, fail to provide an adequate assessment of contractor performance. Contract specialists (7 of 15), AROICC's (11 of 62), and supervisory civil engineers (2 of 7) said the evaluations would be more valuable if more specific evaluation items were used. Though these numbers don't represent a majority of the survey populations, they are significant because the responses were made to an open-ended question. Within the context of the model, the OICC as decision maker would receive more information if more specific items were evaluated.

f. Requisite Variety

The OICC as decision maker must look at a contractor's record of past performance and decide whether or not to give him another award. As currently used, a marginal contractor, a satisfactory contractor, and a very good contractor all receive a satisfactory rating. The system does not allow a distinction between those levels of performance. Contract specialists (7 of 15) and AROICC's (11 of 62) said there should be additional ratings (i.e., marginal and highly satisfactory). These were also responses to an open-ended question. These extra categories

would provide OICC's more precise information about a contractor's past performance.

g. Valence

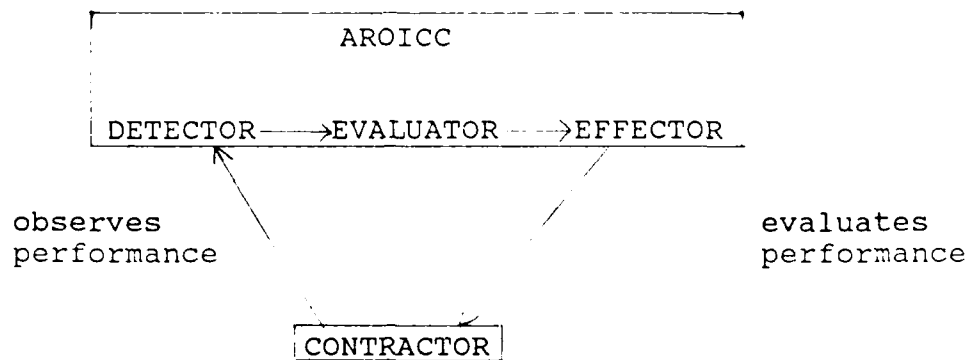
To what degree are the measurements tied to the organizational reward system? Of 20 offices surveyed, 12 withheld no contract awards due to unsatisfactory contractor past performance. Only 3 of 20 withheld more than 1 contract. 22 of 32 contractors responding had never seen a performance evaluation before. 13 of 62 AROICC's commented (in response to an open-ended question) that the evaluations were not useful because unsatisfactory contractors continue to receive awards. 3 of 62 said NAVFAC needs a meaningful reward system to recognize its outstanding contractors. Clearly there is an absence of valence within the evaluation system.

B. USE II--CONTROLLING ONGOING CONTRACTOR PERFORMANCE

1. Review

NAVFAC's use of contractor performance evaluations to control ongoing contractor performance is analyzed below. This model reproduced from Chapter III depicts the control system:

## CONTROL SYSTEM



### 2. Analysis

The FAR, DFARS, and NAVFAC P-68 do not acknowledge this potential use for contractor performance evaluations. 2 of the 5 EFD's surveyed (Pacific and Atlantic) do offer guidance for issuing interim evaluations as feedback to contractors. When analyzed from the viewpoint of accepted control theory, NAVFAC's current use of the contractor performance evaluation system to control ongoing contractor performance is weak in these areas.

#### a. Relevance

Looking backward, relevance implies feedback value. NAVFAC notifies a contractor of his performance evaluation only if his performance was unsatisfactory (6.4% of the time). That notification is made after the contract is already completed. To the contractor as decision maker (deciding how to behave), that information is not relevant (because it is not timely). The behavior in question is



completed and cannot be changed. Within the context of this model the performance evaluations are irrelevant.

Interim evaluations would provide contractors relevant information. 10 of 15 AROICC's who've used interim evaluations before observed a noticeable improvement in contractor performance. 13 of 19 contractors said they'd like to receive interim evaluations because they provide feedback on their performance.

b. Usefulness For Decision Making

18 of 19 contractors said they'd like to receive copies of their final performance evaluation. The contractors also placed a fairly high value on their evaluations they've received in the past (average 7.9 on a scale of 1 to 10). Although the final evaluations would not provide timely information about their performance on the ongoing contract, it would give the contractors feedback necessary to adjust their performances on future contracts.

c. Understandability

Information cannot be useful to decision makers who cannot understand it. The contractors as decision makers must be able to understand the evaluations they receive. The lack of standards, training, and a policy statement to contractors about the uses of evaluations decreases their understandability.

d. Requisite Variety

This factor is a problem within the context of this model also. "Individuals tend to achieve easy goals but not exceed them." (Lawler and Rhode, 1976, p. 42) Since NAVFAC rates both marginal and very good contractors as satisfactory, marginal performance has become the "easy goal" of contractors. With more rating categories, the marginal performers can be identified, and all contractors can strive to become exceptional or outstanding.

e. Completeness

Recall that incomplete measures motivate people to perform only a portion of the behavior needed for organizational effectiveness. More specific rating items will provide contractors with more specific, and thus more complete feedback. The contractors will then be able to focus their efforts on all the behaviors needed to complete the contracts according to NAVFAC's standards.

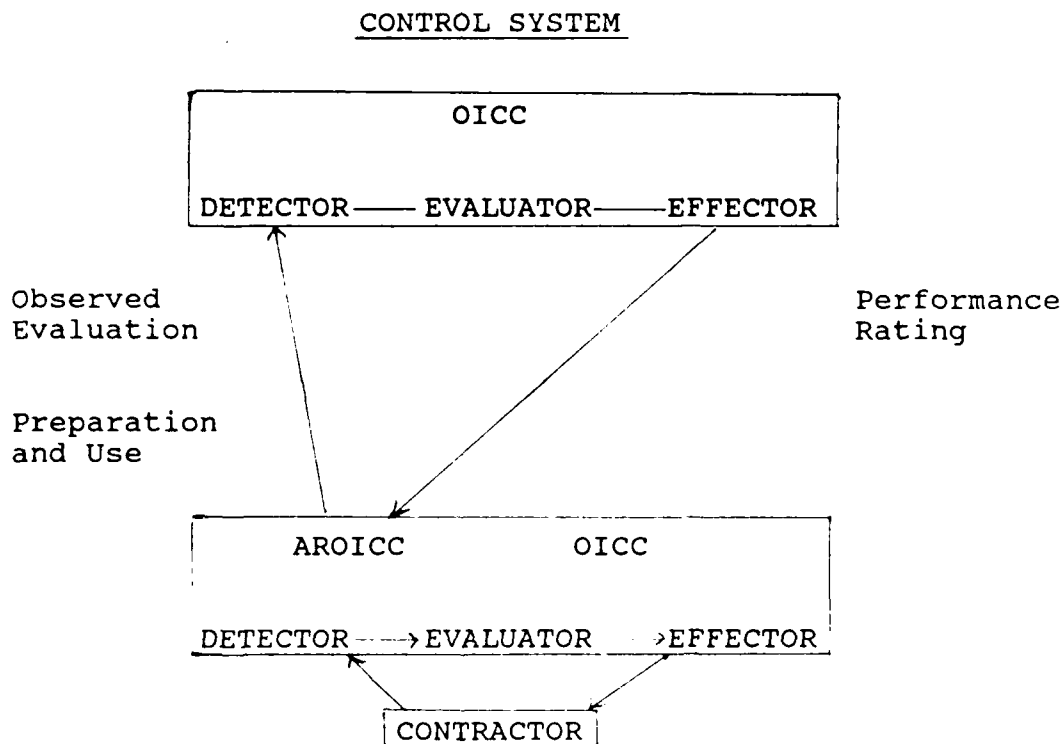
f. Controllability

The contractor has control of his own behavior. However, if he does not know what behavior is acceptable because he lacks feedback, the evaluation he receives is not completely within his control. With interim evaluations the contractor would have some very definite feedback mid-way through his performance, and could modify his behavior accordingly to improve his final evaluation.

### C. USE III--CONTROLLING AROICC PERFORMANCE

#### 1. Review

Recall in this model that the AROICC uses information from contractors' past performance evaluations to predict future contractor behavior. That future behavior can then be anticipated and better managed by the AROICC. Within this model the OICC places management emphasis on the completion and use of contractor performance evaluations by including them as a criteria for the AROICC's personal performance rating. This model reproduced from Chapter III depicts the control system.



## 2. Analysis

The data shows that only 38% of the AROICC's have referred to a contractor's past performance evaluations before the start of a new contract. 40% of AROICC's said evaluations are stressed by management only when they are overdue or unsatisfactory. 45% of contract specialists said management placed less than a fair amount of stress on evaluations. When analyzed from the viewpoint of accepted control theory, NAVFAC's current use of the contractor performance evaluations to control AROICC performance is weak in the following areas.

### a. Usefulness For Decision Making

The evaluations can be used for many purposes within the context of this model. Recall that 60% of the AROICC's surveyed did not know where to find copies of the evaluations. 61% of the AROICC's never refer to contractors' past evaluations prior to administering a contract. That knowledge about a contractor's history of performance would be useful when developing a strategy for administering and inspecting a contract. Additional attention to weak areas of performance may avoid repeating past problems. These comments by Schmode, the supervisory civil engineer at New London, CT provide one view on this subject (see Appendix I for a copy of Schmode's complete memorandum):

The specific report required by reference (a) is fine for the purpose intended but does not provide us with the information that would prove useful in fulfilling our administrative responsibilities for follow-on contracts

with the same contractor. The five performance elements identified in the reference (a) required report (SF 1420) are much too general and the wide dispersion between "satisfactory" and "unsatisfactory" leave much to be desired. Basically, we need to know who our marginal contractors are, who our satisfactory contractors are that have some marginal or unsatisfactory traits. If we know in advance of the specific areas in which our contractors have proven themselves to be less than satisfactory, we can give our attention to those specific areas including emphasis during the Preconstruction Conferences. In short, we need a system that can be accurate, objective, consistent, require minimum effort, and can be cumulative. (Schmode, 1985, p. 1)

The remainder of Schmode's memorandum describes such a system.

b. Reliability

26% of the AROICC's surveyed did not know their EFD's had an instruction covering contractor performance evaluations. Only 38% of AROICC's had ever received training on how to complete an evaluation. These facts indicate there may be a lack of consistency, stability, and dependability in the evaluations prepared by those AROICC's. If OICC's use the contractor evaluations as a rating criteria of the AROICC, then the AROICC's will be motivated to prepare higher quality evaluations. These higher quality, more reliable evaluations will consequently improve the usefulness of the evaluations for the other two purposes previously discussed.

c. Requisite Variety and Completeness

Increased management emphasis on evaluation preparation will cause AROICC's to evaluate contractors more thoroughly on all elements of their performance. The

resultant evaluations will improve their utility for their other two uses.

d. Valence

When asked to rate the evaluations's effectiveness for improving contractor performance a majority of the AROICC's said the evaluations were not effective (trimmed average 2.96 on a scale of 1 (not effective) to 10 (very effective)). 40% of the AROICC's said management emphasizes the evaluations less than occasionally. 13 of 62 AROICC's said the evaluations are not effective because contractors rated unsatisfactory continue to get awards. There is a general impression that the evaluations do not make any difference. This low valence level adversely affects the quality of evaluations prepared and the use of evaluations by the AROICC's.

D. SUMMARY

This chapter analyzed each of the three possible uses for contractor performance evaluations from the viewpoint of accepted control and measurement theory. The next chapter uses that analysis as a basis for some conclusions and recommendations about NAVFAC's current use of construction contractor performance evaluations.

## VI. CONCLUSIONS AND RECOMMENDATIONS

The previous five chapters included the background, theory, data, and analysis about NAVFAC's current use of contractor performance evaluations. This chapter draws some conclusions about that use and makes recommendations on how NAVFAC can improve its use of the evaluations.

### A. CONCLUSIONS

After reviewing the information in previous chapters, the following conclusions are made about NAVFAC's current use of contractor performance evaluations:

1. NAVFAC lacks standards of performance which clearly describe the difference between unsatisfactory, satisfactory, and outstanding performance.
2. The construction contractors are not generally aware of the performance evaluation system.
3. The evaluations are not used to provide contractors feedback about their performances.
4. The evaluations are not timely, because they are written after the performance is completed.
5. AROICC's are not well trained in completing the evaluations. The lack of training adversely affects the reliability of the evaluations.
6. Management emphasis on the evaluation process could be improved.
7. There is no well publicized incentive for contractors to provide outstanding performance.
8. The evaluations are under-utilized for each of the three possible uses.

9. The Standard Form 1420 is not specific enough in identifying the elements of contractor performance to be evaluated.
10. The data base of information from the evaluations is inadequate.

B. SHORT-TERM RECOMMENDATIONS

These recommendations for improving NAVFAC's contractor performance evaluation system could be implemented quickly.

1. Policy Statement--NAVFAC should issue a policy statement describing:
  - a. The uses of the contractor performance evaluations.
  - b. The standards of performance required for satisfactory, outstanding, and unsatisfactory performance ratings.
  - c. An explanation of the evaluation elements.

This policy statement would increase contractor awareness of the evaluation system and improve the consistency, completeness, reliability, and usefulness of the evaluations. A draft policy statement is included in Appendix J.

2. Interim Evaluations--To provide contractors timely feedback about their contract performance, NAVFAC should require field offices to issue interim evaluations. The Standard Form 1420 can be used with a cover letter explaining the purpose of the interim evaluations. Some field offices may view this requirement as excessive due to their already heavy administrative workload. The time spent preparing the interim evaluations should be offset by time saved when improved contractor performance decreases the administrative burden. The interim evaluations are also useful and should be required when the AROICC on a contract is replaced.
3. Contractor Notification--NAVFAC should provide all contractors a copy of their performance evaluations. The feedback value of these evaluations should not be wasted. Knowing the evaluations are sent to the contractors should increase the AROICC's objectivity when preparing them.



4. Training--Field offices should train AROICC's on how to complete evaluations. The AROICC's should also learn the purposes and standards for the evaluations. This training can be conducted at the field level using the policy statement as a guide. The training will improve the consistency, completeness, and reliability of the performance evaluation process.
5. Management Emphasis--Management personnel should rate their AROICC's on how well they prepare and use the performance evaluations. This increased management emphasis on the evaluations will improve their use as a source of information about prospective contractor performance histories. AROICC's will take more care in preparing contractor evaluations if they know their personal performance rating is at stake.
6. Reward System--All contractors rated outstanding should receive an award for their work. The awards should be meaningful and immediate. The contractors should know in advance what award is given for outstanding performance. In the short term, types of awards that can be given include:
  - a. Special command recognition in the form of newspaper articles, special ribbon cuttings, letter of commendation, etc.
  - b. Recommendation to other clients about the contractors outstanding work.
7. Publicize the System--When performance evaluations are used to deny an unsatisfactory contractor a contract award NAVFAC should publicize it. Too many people neglect the evaluation system because they feel it doesn't work.
8. Justify Satisfactory Ratings--A narrative should be required for satisfactory evaluations also. AROICC's should cite a contractor's strong and weak points even if the rating is satisfactory. That information is useful for predicting performance on future contracts. Not requiring a narrative on satisfactory ratings gives AROICC's pressed for time a quick means of completing the evaluation requirement.

#### C. LONG-TERM RECOMMENDATIONS

1. Modify the SF 1420--The current form does not evaluate contractors in enough specific areas. The form needs more rating categories to differentiate the marginal

from the satisfactory and highly satisfactory contractors. A draft modification of the form is included as Appendix K.

2. Rewards--In the long term NAVFAC should be able to develop some tangible and meaningful reward for contractors who perform outstanding work. The contractor community could be consulted for suggestions.
3. Improve the Data Base--Manual record keeping of contractor performance information is inadequate. Very few of the contract specialists surveyed use the EFD files of contractor performance evaluations. A computerized data base would be used (6 of 7 supervisory civil engineers said they would use it). The data base should include:
  - a. A summary of each contractor's evaluation ratings
  - b. One line statements of contractor strengths and deficiencies.

The data base should be accessible to field offices without significant assistance from EFD personnel.

## APPENDIX A

### DEFINITIONS

AROICC--Assistant Resident Officer-in-Charge of Construction. Within the NAVFAC system this term refers to a Civil Engineer Corps Officer who directly administers construction contracts. Within the context of this study the term AROICC refers to both military and civilian personnel who directly administer construction contracts.

Supervisory Civil Engineer--The senior civilian manager of a contracting field office. A senior Civil Engineer Corps officer is normally also assigned to manage in most NAVFAC field offices.

Contract Specialist--Within the context of this study a contract specialist works in field offices: preparing contracts for advertisement and award, doing pre-award surveys, resolving contractual problems, and otherwise supporting the contracting efforts.

OICC--Officer-in-Charge of Construction. Usually a senior Civil Engineer Corps Officer with delegated contracting authority. By virtue of that authority he is responsible for the success of all contracting actions he issues. The OICC usually prepares personnel performance evaluations on AROICC's within his jurisdiction. The OICC also can recommend denying a contractor an award based on his determination that the contractor is not responsible.

# APPENDIX B

## STANDARD FORM 1420

FOR OFFICIAL USE ONLY  
(WHEN COMPLETED)

PERFORMANCE EVALUATION - CONSTRUCTION CONTRACTS		1. CONTRACT NUMBER
PART I - GENERAL CONTRACT DATA		
2. CONTRACTOR (Name, address and ZIP code)	3. TYPE OF CONTRACT (Check)	A. ADVERTISED B. NEGOTIATED <input type="checkbox"/> CPEP <input type="checkbox"/> FIRM FIXED PRICE <input type="checkbox"/> OTHER (Specify)
	4. COMPLEXITY OF WORK	<input type="checkbox"/> DIFFICULT <input type="checkbox"/> ROUTINE
5. DESCRIPTION AND LOCATION OF WORK		

6. FISCAL DATA	A. AMOUNT OF BASIC CONTRACT	B. TOTAL AMOUNT OF MODIFICATION	C. LIQUIDATED DAMAGES ASSESSED	D. NET AMOUNT PAID CONTRACTOR
	\$	\$	\$	\$
7. SIGNIFICANT DATES	A. DATE OF AWARD	B. ORIGINAL CONTRACT COMPLETION DATE	C. REVISED CONTRACT COMPLETION DATE	D. DATE WORK ACCEPTED
8. TYPE AND EXTENT OF SUBCONTRACTING				

PART II - PERFORMANCE EVALUATION OF CONTRACT (Check appropriate box)			
9. PERFORMANCE ELEMENTS	OUTSTANDING	SATISFACTORY	UNSATISFACTORY
A. QUALITY OF WORK			
B. TIMELY PERFORMANCE			
C. EFFECTIVENESS OF MANAGEMENT			
D. COMPLIANCE WITH LABOR STANDARDS			
E. COMPLIANCE WITH SAFETY STANDARDS			
10. OVERALL EVALUATION	<input type="checkbox"/> OUTSTANDING (Explain in Item 13, on reverse) <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY (Explain in Item 14, on reverse)		
11. EVALUATED BY			
A. ORGANIZATION (Type or print)			
B. NAME AND TITLE (Type or print)	C. SIGNATURE	D. DATE	
12. EVALUATION REVIEWED BY			
A. ORGANIZATION (Type or print)			
B. NAME AND TITLE (Type or print)	C. SIGNATURE	D. DATE	



540-01-150-0328

FOR OFFICIAL USE ONLY  
(WHEN COMPLETED)

STANDARD FORM 1420 (10-83)  
Prescribed by GSA  
FAR (48 CFR) 53.236-1(b)

FOR OFFICIAL USE ONLY  
(WHEN COMPLETED)

13. REMARKS ON OUTSTANDING PERFORMANCE AS INDICATED BY THE CONTRACTOR'S PERFORMANCE IN THIS CONTRACT. (If the contractor is to be outstanding, set forth factual data supporting this observation. These data must be in sufficient detail to assist contracting officers in selecting contractors that have demonstrated outstanding quality of work and reliability. (Continue on separate sheet, if needed.)

14. EXPLANATION OF UNSATISFACTORY EVALUATION. FOR EACH UNSATISFACTORY ELEMENT, PROVIDE FACTS CONCERNING SPECIFIC EVENTS OR ACTIONS TO JUSTIFY THE EVALUATION (to a extent of Government inspection is required, provide required subcontracting cooperation etc. for quality of workmen and adequacy of equipment). THESE DATA MUST BE IN SUFFICIENT DETAIL TO ASSIST CONTRACTING OFFICERS IN DETERMINING THE CONTRACTOR'S RESPONSIBILITY. (Continue on separate sheet, if needed.)



1983 O - 381-525 (9007)

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STANDARD FORM 1420 BACK (10-83)

APPENDIX C

AROICC SURVEY

1. Approximately how many satisfactory, outstanding, and unsatisfactory contractor performance evaluations have you written during your career as a contract administrator?

Satisfactory \_\_\_\_ Outstanding \_\_\_\_ Unsatisfactory \_\_\_\_

2. Does your EFD have an instruction governing contractor performance evaluations? YES/NO

If yes, how much help does it provide when you are filling out an evaluation? (CIRCLE ONE)

A BIG HELP    SOME HELP    A LITTLE HELP    NO HELP

3. Listed below are some possible uses of performance evaluations. Please rank them in order from (1) meaning the most important use, to (5) meaning the least important use. (If you add a use in the other spot, rank from 1 to 6)

- \_\_\_\_ Use to Provide Feedback to the Contractors
- \_\_\_\_ Use to Support Findings of Non-Responsibility, and thus Deny Contractors an Award
- \_\_\_\_ Used by Contract Specialists During the Pre-Award Survey
- \_\_\_\_ Use to Give AROICC's Information About a Prospective Contractor
- \_\_\_\_ Use to Satisfy the FAR Requirement to Complete an Evaluation
- \_\_\_\_ OTHER (Please Specify) \_\_\_\_\_

4. Have you ever received any training on how to complete the performance evaluation form? YES/NO

If yes, which of these statements most accurately describes the level of your training? (CHECK ONE)

- \_\_\_\_ Formal Classroom Training
- \_\_\_\_ Briefed during ROICC Staff Meeting
- \_\_\_\_ OJT by Contract Specialist or another AROICC
- \_\_\_\_ Given a Copy of an old Evaluation as a Guide
- \_\_\_\_ Other (Please Specify) \_\_\_\_\_

5. Do you ever review a contractor's record of past performance prior to the start of a new contract? (YES/NO)

If yes, approximately how often do you do so? (CIRCLE ONE)

Always	75% of the time	50% of the time	25% of the time	5% of the time
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6. Do you know where you could find a file of all of a particular contractor's past performance evaluations? YES/NO Where? \_\_\_\_\_

7. On a scale of 1 to 10, how effective do you think the existing performance evaluation system is at improving the overall performance by NAVFAC contractors? (CIRCLE A NUMBER)

1	2	3	4	5	6	7	8	9	10
Not Effective					Very Effective				

8. Have you ever written an interim evaluation on a contractor mid-way through a project? YES/NO

If yes, what effect does the interim evaluation have on the contractor's performance? (CIRCLE ONE)

Improvement    Some Improvement    Little Improvement    No Change

9. Do you think interim evaluations would help you to positively influence a contractor's behavior? YES/NO

Why? \_\_\_\_\_

10. Which of these statements most accurately describes how much emphasis your office management places on the performance evaluations? (CHECK ONE)

☐ Evaluations Are Stressed Frequently  
☐ Evaluations Are Stressed Occasionally  
☐ Evaluations Are Stressed When A Contractor's Performance is UNSAT  
☐ Evaluations Are Stressed When They're Overdue to the EFD  
☐ Evaluations Are Never Stressed

11. What comments do you have about the way we evaluate our contractors? Please include any suggestions you have for improving the evaluation process. (Use back of page if you need more room.)

# CONTRACTOR SURVEY

\_\_\_\_\_

\_\_\_\_\_



6. Do you have a system for evaluating your subcontractors?  
YES/NO

\_\_\_ If yes, could you please describe your system or enclose  
some information about your system (i.e., rating forms)?

---

---

7. Would you find it useful to receive a copy of your  
performance evaluation for each contract you perform?  
YES/NO

Why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. What comments do you have about the way NAVFAC evaluates  
its contractors? Please include any suggestions you have  
for improving the evaluation process.

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APPENDIX E

CONTRACT SPECIALIST SURVEY

1. What % of the time do you refer to a contractor's past performance evaluations to assist you during the Pre-Award Survey process?

0%      10%      30%      50%      70%      90%      100%

On what types of awards (i.e., unknown contractor, MCON job, etc.)

---

2. What % of the time do you discuss the pre-award survey results with the AROICC assigned to the project?

0%      10%      25%      50%      70%      90%      100%

Under what circumstances do you do so?

3. What source/sources do you use to find copies of a contractor's past performance evaluations? (i.e., EFD file, ROICC file)

4. About what % of the time do you use your EFD's past performance evaluation files when doing a Pre-Award survey?

0%      10%      25%      50%      75%      90%      100%

Under what circumstances? (i.e., MCON job)

5. How would you rate the quality of the performance evaluations you've seen in your office?

Do you think they'd stand up in court in support of a non-responsibility determination?

6. How much emphasis is placed on the evaluation process within your office?

\_\_\_\_ A LOT  
\_\_\_\_ A FAIR AMOUNT  
\_\_\_\_ SOME  
\_\_\_\_ A LITTLE  
\_\_\_\_ NONE

7. In the past year, how many contract awards have you withheld from the apparent low bidder because of his record of past performance?

\_\_\_\_ Was it easy to do? Y/N Why not?

Would it have helped if you had 3 or 4 well-documented unsats to reference in your request for award denial? Y/N

8. What comments or suggestions for improving the evaluation process do you have?

Can you give me the names of

1. Sup Civil \_\_\_\_\_ How long been on job \_\_\_\_\_
2. Civilian Contract Administrator \_\_\_\_\_  
How long \_\_\_\_\_

# APPENDIX F

## PACIFIC DIVISION CONSTRUCTION CONTRACTOR PERFORMANCE EVALUATION REPORT--SUPPLE- MENTAL INFORMATION SHEET

MCNANTAGCOMINST 4330.4  
16 JUL 65

### CONSTRUCTION CONTRACTOR PERFORMANCE EVALUATION REPORT SUPPLEMENTAL INFORMATION SHEET

Codes: O = Outstanding    E = Excellent    S = Satisfactory  
M = Marginally Satisfactory    U = Unsatisfactory

FACTOR	O	E	S	M	U
1. Ability to prepare and timeliness in submission of schedule of prices, bill of materials and progress charts/networks . . . . .					
2. Ability to submit shop drawings, brochures, and catalog cuts in accordance with contract requirements . . . . .					
3. Ability to follow up and control equipment and material requirements . . . . .					
4. Ability to deliver materials to jobsite on time.					
5. Quality of Management: a. Field Management . . b. Office Management . .					
6. Quality of Workmanship . . . . .					
7. Compliance with security requirements . . . . .					
8. Timely completion of contract . . . . .					
9. Capability to provide adequate equipment and tools as needed . . . . .					
10. Capability to regain lost time when behind schedule . . . . .					
11. Capacity to secure adequate labor . . . . .					
12. Compliance with safety standards . . . . .					
13. Ability to pay subcontractors, material and personnel . . . . .					
14. Timely response to Government requests . . . . .					
15. Overall performance rating . . . . .					
Remarks					

## PACIFIC DIVISION EVALUATION RECORD FORM

74

APPENDIX H

SUPERVISORY CIVIL ENGINEER SURVEY

1. How well does your EFD instruction governing contractor performance evaluations help the AROICC's when they're filling out the evaluations?

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2. What changes would you suggest to improve the usefulness of the instruction?

---

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3. Do you provide your AROICC's any training on how to complete the performance evaluation form? YES/NO (Circle One)

What kind of training? \_\_\_\_\_

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---

4. Does your office keep separate performance evaluation files on each contractor? YES/NO (Circle One)

5. On a scale of 1 to 10, how effective do you think the existing performance evaluation system is at improving the overall performance by NAVFAC contractors? (CIRCLE A NUMBER)

1	2	3	4	5	6	7	8	9	10
Not Effective					Very Effective				

6. Does your office write interim evaluations on contractors mid-way through a project? YES/NO

If yes, what do the interim evaluations usually have on the contractor's performance? \_\_\_\_\_

---

7. Do you think NAVFAC should issue interim evaluations on all of its construction contracts? YES/NO

Why? \_\_\_\_\_

---

8. What do you think of the form we use for contractor performance evaluations (SF 1420)? Would you make any changes to the form, and if so what changes?

---

---

9. If you had access using the office computer to a file listing all of a contractor's past performance evaluations, would you use it to get a feel for how a prospective contractor of yours usually performs? YES/NO

10. Do you think we should give our contractors a copy of their performance evaluations at the end of a contract? YES/NO Why or why not?

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11. What comments do you have about the way we evaluate our contractors? Please include any suggestions you have for improving the evaluation process. (Use back of page if you need more room)

## APPENDIX I

### SCHMODE MEMORANDUM ON CONTRACTOR PERFORMANCE REPORT (CPR)

OPNAV 5216/144A (Rev. 8-81)  
S/N 0107-LF-062-2320

DEPARTMENT OF THE NAVY  
*Memorandum*

DATE: 26 Nov 85

FROM: Code R-1

TO: Distribution List

SUBJ: CONTRACTOR PERFORMANCE REPORT (CPR)

Ref: (a) NORTHNAVFACENGCOMINST 4335.5 Subj: Performance Evaluations of  
Construction Contractors

Encl: (1) Sample CPR Form

1. We are tasked by reference (a) to evaluate the performance of our various construction contractors at the conclusion of their contract. The specific report required by reference (a) is fine for the purpose intended but does not provide use with the the information that would prove useful in fulfilling our administrative responsibilities for follow-on contracts with the same contractor. The five performance elements identified in the reference (a) required report are much too general and the wide dispersion between "satisfactory" and "unsatisfactory" leave much to be desired. Basically, we need to know who our marginal contractors are, who our satisfactory contractors are that have some marginal traits and what these marginal or unsatisfactory traits are. If we know in advance of the specific areas in which our contractors have proven themselves to be less than satisfactory, we can give our attention to those specific areas including emphasis during the Preconstruction Conferences. In short, we need a system that can be accurate, objective, consistent, require a minimum of effort, and can be cumulative.

2. Talking to a number of you, the following 12 factors seem to cover the majority of the significant elements that should be our concern:

- (1) Superintendent.
- (2) Safety.
- (3) Timely Completion.
- (4) Shop Drawings.
- (5) Completion of "Punch List".
- (6) As-Built Drawings.
- (7) Change Order Negotiations.
- (8) Cooperation.
- (9) DRIs.
- (10) Payrolls.
- (11) Quality Assurance.
- (12) Technical Capability.



A brief description of what is intended for each element is in order.

Superintendent. On site when work in progress; coordinates work of subcontractors; expedites work; controls project, etc.

Safety. Site cleanliness; safety meetings; enforces hard-hats; accident reports, etc.

Timely Completion. Project B.O.D.'d within current contract completion date.

Shop Drawings. Timely submission and complete; contains KR certification stamp; submittal log.

Completion of Punch List. Completion within reason after BOD; works on own initiative.

As-Built Drawings. Keeping current as job progresses; timely submission at BOD.

Change Order Negotiations. Timely response to RFPs; reasonableness of cost breakdown; willingness to negotiate a fair and reasonable price and time.

Cooperation. Willingness to work with inspector and project engineer.

DR's. Timely submission and completeness.

Payrolls. Timely submission without discrepancies.

Quality Assurance. Workmanship and willing compliance with plans and specs.

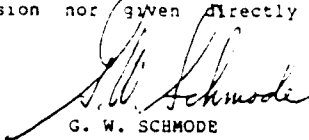
Technical Capability. Competency of contractor to do the work; ability to provide adequate workmen and equipment.

3. A simple grading system that is self-explanatory is as follows:

Outstanding	- 5
Above Average	- 4
Satisfactory	- 3
Marginal	- 2
Unsatisfactory	- 1

It is expected that a majority of our contractors will fall in the "Satisfactory" category. As previously stated, it is those contractors that have certain elements that fall in the "Unsatisfactory" or "Marginal" category that we are primarily concerned with. At the time we complete the more formal Construction Contractor Performance Evaluation Report, the project engineer and the project inspector will collectively complete this new Contractor Performance Report (CPR) by assigning numerical "grades" to each of the 12 elements. If a grade is either 1 or 2, a very brief explanation is to be provided. The combined effort of the inspector and the project engineer should not require much over 15 to 20 minutes. The CPR will be prepared for all construction contracts. The cumulative results of these reports will be posted in our computer and will be available for immediate recall for use on subsequent contracts with the contractor involved.

4. A sample of the CPR form to be used is attached as enclosure (1). The form provides for the indication of the general classification of the type of project involved, e.g., electrical, painting, general, etc. Please advise if you have any suggestions on how to improve this reporting system or the form itself. This report is for internal use only and the information will neither be forwarded to Northern Division nor given directly to the contractor involved.

  
G. W. SCHMODE  
Supvry Civil Engineer

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R-20  
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0159P

OICC/ROICC NEWPORT

CONTRACTOR PERFORMANCE REPORT (CPR)

DATE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ BOD DATE: \_\_\_\_\_

CONTRACT NO.: \_\_\_\_\_ ACTIVITY: \_\_\_\_\_

BRIEF TITLE: \_\_\_\_\_ TYPE PROJECT: \_\_\_\_\_

ELEMENT	PERF. GRADE	EXPLANATION IF 2 OR 1	
Superintendent		Name:	
Safety			
Timely Completion			
Shop Drawings			
Punch List Completion			
As-Built Drawings			
Change Order Negotiations			
Cooperation			
CRIs			
Payrolls			
Quality Assurance			
Technical Capability			
OVERALL:			

- 5 = Outstanding
- 4 = Above Average
- 3 = Satisfactory
- 2 = Marginal
- 1 = Unsatisfactory

PROJECT INSPECTOR

PROJECT OWNER

File Copy

Page \_\_\_\_\_ Date Entered \_\_\_\_\_

10

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OICC/ROICC NEWPORT

SAMPLECONTRACTOR PERFORMANCE REPORT (CPR)DATE: 31 Jan 86CONTRACTOR: Marin Construction CoBOD DATE: 5 Oct 85CONTRACT NO.: 82-C-1254ACTIVITY: Mar 2000BRIEF TITLE: Window ReplacementTYPE PROJECT: Repair

ELEMENT	PERF. GRADE	EXPLANATION IF 2 OR 1
Superintendent	2	Name: <u>Rafanelli</u> Super was frequently absent from the project
Safety	2	KR had to be told about unsafe staging and hoists
Timely Completion	3	
Shop Drawings	3	
Punch List Completion	2	KR exceptionally slow in completing items, BOD 5 OCT 85 for 15 items
As-Built Drawings	3	
Change Order Negotiations	3	
Cooperation	3	
DRIs	2	KR lax in submitting DRIs on a daily basis
Payrolls	3	
Quality Assurance	3	
Technical Capability	3	
OVERALL:	2	Explanation above, plus, the KR quite often reflected the opinion that his Sub was responsible for correction deficiencies, not him (the prime).

- 5 = Outstanding  
 4 = Above Average  
 3 = Satisfactory  
 2 = Marginal  
 1 = Unsatisfactory

J. M. Hansen  
 PROJECT INSPECTOR

Tom F. [Signature]  
 PROJECT ENGINEER

File 99 R-1 99 RO-1 (Data Entered) 4M

A. INIEMI: The purpose of this statement is to

Department of

with a view to

construction of the

to:

- (1) Establish the nature of the problem and use the criteria for determining the nature of the problem.
- (2) Provide a basis for determining the nature of the problem.
- (3) Implement the criteria for determining the nature of the problem.
- (4) Promulgate the criteria for determining the nature of the problem.

This statement is intended to be a statement of

standing of the problem.

Criteria for determining the nature of the problem

policy statement of the nature of the problem.

The purpose of this statement is to provide a basis for determining the nature of the problem.

B. The purpose of this statement is to provide a basis for determining the nature of the problem.

- (1) Implement the criteria for determining the nature of the problem.
- (2) Implement the criteria for determining the nature of the problem.

4. ARSIC will assess a contractor's strengths and weaknesses prior to administering a new contract.

5. ARSIC will select the three existing contracts for the period 1977-1978 for rating. The ratings will be original and highly satisfactory. These ratings will be for performances worthy of each contract.

6. The contractor will meet or exceed all contract requirements; display a high level of professional performance; anticipate most potential problems within the realm of his responsibility and implement effective solutions; cooperate fully (within the requirements of the contract) with the ARSIC; and provide the amount of government administration effort in the contract.

7. The contractor will meet or exceed all contract requirements; display professionalism in all aspects of performance; anticipate most potential problems within the realm of his responsibility and implement effective solutions; cooperate (within the requirements of the contract) with the ARSIC; and provide amount of government administration effort in the contract.

8. The contractor will meet all contract requirements; display an average amount of professional performance; anticipate some problems within the realm of responsibility and implement effective solutions; cooperate (within the requirements of the contract) with the ARSIC; and provide the amount of government administration effort in the contract.

9. The contractor will meet all contract requirements; display a low level of professional performance; anticipate some problems within the realm of the particular contract; implement effective solutions; cooperate (within the requirements of the contract) with the ARSIC; and provide the amount of government administration effort in the contract.

an excessive amount of government administrative effort on the contract.

Unsatisfactory--The contractor has failed to meet the minimum contract requirements even after significant administrative effort by the government. The contractor was uncooperative, failed to anticipate problems within the realm of his responsibility, and did not attempt to develop solutions. The contractors actions were not professional.

D. EVALUATION ELEMENTS--Within the 5 broad evaluation elements on the SF 1420 contractors will be specifically rated on:

Broad Element	Specific Element
A. Quality of Work	1. Materials Used 2. Workmanship 3. Quality Assurance Plan and Efforts
B. Timely Performance	1. Scheduling 2. Punch List Completion
C. Effectiveness of Management	1. Effectiveness of Superintendent 2. Cooperation 3. Administration (i.e., submittals, payrolls)
D. Compliance With Labor Standards	1. Payrolls 2. Violations
E. Compliance With Safety Standards	1. Safety Awareness and Attitude 2. Safety Plan 3. Safety Record

Although these specific items may have been implicitly evaluated using the SF 1420, they will now be explicitly evaluated using this modified system. The contractors and APOICC's both know what areas of performance will be



evaluated. The general standards can be applied to each specific evaluation element. As an example, the following standards could apply to Quality of Work-Materials Used:

Outstanding --All materials met or exceeded specific quality requirements. Complete and acceptable material submittals were made as required. Manufacturers recommendations and appropriate industry practices were followed when using all materials. Obvious care was taken when storing and handling materials. No government effort was needed to ensure compliance with materials requirements.

Highly

Satisfactory--All materials met or exceeded specified quality requirements. Complete and acceptable material submittals were made as required. Care was taken when storing and handling materials. Manufacturers recommendations and appropriate industry practices were followed most of the time. Very little government effort was needed to ensure compliance with material requirements.

Satisfactory--All materials met or exceeded specified quality requirements. Complete and acceptable submittals were made as required. Some resubmittals were needed before final material approval was granted. Normal care was usually taken when storing and handling materials. Manufacturers recommendations and industry practices were usually followed. Government effort was required occasionally to ensure compliance with material requirements.

Marginally

Satisfactory--All materials met specified quality requirements. Complete and acceptable submittals were made only after several attempts. Below average care was taken when storing and handling materials. Manufacturers recommendations and appropriate industry practices were occasionally violated. A large amount of government effort and some rework was required to ensure compliance with material requirements.

Unsatisfactory--Not all materials met specified quality requirements. Material submittals were

incomplete and often unacceptable. Little care was taken when storing and handling materials. Manufacturers recommendations and appropriate industry practices were not routinely followed. A significant amount of government effort and rework was required to bring the contractor into compliance with material requirements.

E. PREPARATION AND DISTRIBUTION: When reasonable to do so, or when requested by a contractor, the AROICC will issue an interim evaluation at the mid-point of the contract duration. The interim evaluation is intended to provide contractors feedback about their performance. The contractors final performance evaluation rating is intended to rate the contractors performance over the entire period and therefore should not depend necessarily on the interim evaluation ratings.

Interim evaluations should be sent to the contractors at the mid-point of the contract duration. If a contract is for an extended period of time, interim evaluations should be written at least for every 6 months of performance. Final performance evaluations will be sent to contractors at the time of final payment.

## APPENDIX K

### DRAFT REVISION TO STANDARD FORM 1420

These modifications are recommended for improving the Standard Form 1420.

1. Items 1-8, 11 and 12 should remain unchanged, but the vertical space allowed for items 9, 3, 11, and 12 should be reduced to accommodate the changes to items 9 and 11.

2. Change item 9 to look like this:

9. Perform- ance Elements	Out- stand- ing	Highly Satisf.	Satis- factory	Margi- nally Satisf.	Unsatis- factory
---------------------------------	-----------------------	-------------------	-------------------	----------------------------	---------------------

A. Quality of Work

1. Materials
2. Workmanship
3. Q/A plan

B. Timely Performance

1. Scheduling
2. Punch List

C. Effectiveness of Mgmt.

1. Superintendence
2. Cooperation
3. Administration

D. Compliance w Labor

1. Payrolls
2. Violations

E. Compliance w Safety

1. Awareness Attitude
2. Safety plan
3. Safety record

3. The items 11 and 12 should be explained and defined at the beginning of the report. The report should be written in a clear, concise, and professional manner.

## LIST OF REFERENCES

- Anthony, R.N., Deardon, J., and Bedford, N.M., Management Control Systems, 5th ed., Richard D. Irwin, Inc., 1984.
- Cohen, S.I. and Jafee, C.L., "Managing Human Performance For Productivity," Training and Development Journal, December 1982.
- Department of Defense, DOD FAR Supplement, U.S. Government Printing Office, April 1984.
- Department of Defense, U.S. General Services Administration, and U.S. National Aeronautics and Space Administration, Federal Acquisition Regulation, U.S. Government Printing Office, April 1, 1984.
- Cooperman, R.A., Mail and Telephone Surveys: The Total Design Method, John Wiley & Sons, 1978.
- Drury, R., Management Control: Planning, Control, Measurement and Evaluation, Addison-Wesley, 1984.
- FASB, Statements of Financial Accounting Concepts No. 2, Qualitative Characteristics of Accounting Information, Financial Accounting Standards Board, 1980.
- General Accounting Office, Small Business Administration: Status, Operation, and Views of the Certificate of Competency Act, Report #GAO RCED-86-120BR, U.S. General Accounting Office, April 1986.
- Lawler, E. and Rhode, J., Information and Control in Organizations, McGraw-Hill Publishing Co., 1976.
- McGuire, J., "Planning, Organizing, Systemic Aspects of Management," Working Paper No. 86-12, Naval Postgraduate School, Monterey, California, May 1986.
- Naval Facilities Engineering Command, Contracting Manual-Part 1, Naval Publications and Forms Center, February 1985.
- Naval Facilities Engineering Command, Supervisory Civil Engineers Memorandum #1, Distribution, Subject: Contractor Performance Report #184, 19 November 1985.
- Robbins, S.A., Management, 2nd ed., Prentice-Hall, Inc., 1982.

Wells, R.G., "Guidelines for Effective and Defensible Performance Appraisal Systems," Personnel Journal, October 1982.

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END

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